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AUTHOR Kimball, Richard L.
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ABSTRACT

This conference paper proposes a classification of possible psychological activity and illustrates some ways that cognitive development depends on affective development. Through diagrams and examples, the following assumptions (based on Piaget) are developed: (1) Learning is socially as well as materially oriented. (2) Affective and cognitive development are inextricably intertwined. (3) Affective development is a necessary but not sufficient condition for formal operations development. (4) Research from social interactions in the classroom and therapy sessions give insight to the environment necessary for developing formal operations. Some environmental characteristics related to affective development and cognitive growth are presented, along with some suggestions for enhancing the affective-cognitive link in the psyche. (Author/ED)

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Some Aspects of the Role of Affective Development in Cognitive Development: Relating Formal Operations Learning to Emotional Maturity

A Paper delivered to the Fourth Annual Conference on "Piaget and the Helping Professions," Children's Hospital, Los Angeles, California, February 1974.

INTRODUCTION

This paper follows my paper of last year, "Teaching and Understanding Formal Operations." In that paper I outlined some of the conditions upon which formal operations development depends in classroom learning. In this paper I propsoe a classification of possible psychological activity and then illustrate some ways that cognitive development depends upon affected development.

Piaget has emphasized the need for the inquiry process being maintained in an open and fluid manner for learning to be maximized. To this end, the following assumptions are made:

1. Learning is socially as well as materially oriented.
2. Affective and cognitive development are intimately and inextricably intertwined.
3. Affective development is a necessary but not sufficient condition for formal operations development.
4. Research from social interactions in the classroom and therapy sessions give insight to the environment necessary for developing formal operations.

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A simple model can thus be drawn relating cognitive and affective development.

early cognitive development at home (sensori motor, pre-operations) affective learning (expression of feelings) → "Maturing" affective development ↔ higher order cognitive development (concrete and formal operations) in school and at home

As a teacher or learner you must "feel good" about yourself before you can fully enter into the learning process with another person, maintain inquiry and encourage formal operations development.

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DEFINITIONS

1. Table of possible Psychological Activity

	cognitive ⟷	affective ⟷	sensori-motor	what happens (the product)
conscious	reasoning (1) objective thinking (calculation)	valuing (4) attitudes	perceptions (7) awareness	creativity (insight, thought or materials)
associative interface	ideation (2) (reflection)	feelings (5)	sensing (8)	fantasy (pretending, day dreams, imagination - directed fantasy)
unconscious	intuition (3) subjective thinking (spontaneity)	emotions (6)	autonomic (9) nervous system genetic structures	dreams

Piaget has limited his research to the schema in boxes 1, 2, 4, and 7.

2. Affective Maturity

Maturation is a process whether cognitive or affective. (There is always room for growth.) Affective maturity depends on validating feelings as well as ideas as important components of communication. It also benefits from cognitive symbols of the affective process being enhancers not inhibitors of feelings.

Several authors and researchers have posited goals for human development in affective maturity. Among these goals are the following:

Individuation (Jung)
Whole person, integrated personality, "realness" (rogers)
Self Actualization (Maslow)
Authentic personality completeness (Janov)
Fully conscious, aware of all reality (Pearls)
Responsibility, spontaneity (J.L. Moreno)

EVIDENCE FROM TWO SETTINGS - Reducing behavioral control by authority

1. The Classroom

In research, I have used Piagetian type questions and measures of affective development. The results have been similar whether in America or other countries. I have found a high positive correlation between measures of thinking and feeling.

In a current research project with 9th grade "low achievers" I hypothesized that cognitive development would accelerate if students were grouped according to Piagetian levels. Three grops were chosen: one class of pre operational-concrete transitional students, four classes of concrete thinkers, and one class of concrete-formal trnasitional thinkers. The results have not necessarily confirmed the original hypothesis. The high cognitive groups did change more rapidly than when mixed with the rest. The low group seems less inhibited by a competitive "pecking order." The "average" group is similar to previous classes. Regrouping does enhance learning, but more for reasons of classroom affective "environment" than for cognitive reasons (the curriculum was fairly fixed, although much questioning and manipulation of materials was allowed).

What happens if the grouping is on an affective, not cognitive basis? The compulsive disruptors of the learning process can be put together and handled together by a specialist in channelling that energy into more productive pursuits. The "moderately" secure and adjusted will develop as before, except that the teachers' and students' energies are not diverted from the learning, hence multiplication of positive effort can occur. The environment allows for more risk taking without the use of ridicule which cuts off creativity. A class of very secure students, regardless of cognitive level of development (for the 9th grade probably all would be concrete or concrete-transitonal thinkers) could all be allowed freedome to inquire without fear of disruption.

This thesis can be helpful to any teacher. If the affective atmosphere can be conducive to inquiry through resolution of tension at the feeling level, cognitive growth can be enhanced (assuming the teacher is a formal thinker and trained in affective processes of learning, creativity and the classroom and other learning environments are rich in materials). Glasser and others have encouraged the use of "class discussions," "magic circles," "role playing" and other techniqeus for dealing openly with feelings. As affective maturity develops, higher level cognitive processes are possible and can be enhanced in a wider range of students. The teacher has more alternatives available than "passing the message down."

2. The Therapy Session

Carl Rogers has encouraged therapists to be "real" role models to patients. He emphasizes that the relationship between client and therapist should be "free and open" not "authority to subject." Intherapy as well as the classroom more growth occurs when the patient assimilates and accommodates for himself, not the therapist or teacher for him.

The following model shows the universe of people in our culture and hence possible patients in therapy. It is over simplified but illustrative of possible affective-cognitive influences in the therapeutic setting.

Percentages in each box are approximate. High cognitive refers to formal operations; low to concrete and pre-operations. High affective includes the maturing, open, responsible growth-oriented person; the low includes various levels of closed, rigid, non-risking, idea oriented persons.

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AFFECTIVE

COGNITIVE	high	low
high	5% (1)	5% (2)
low	10% (3)	80% (4)

High affective schema does not always result in high cognitive and vice-versa, contrary to my earlier, more general research. A change in one domain, however, probably results in some change in the other for most people.

People in box number one above donot use "therapy." They have come from homes and schools that have enhanced self image and maintained curiosity (the basis of inquiry and creativity) in spite or rigid structures all around them. They may also have used the "natural" therapy in their environments, besides family: friends, dreams, meditation, prayer, clergy, projection into television, books, films, or pictures.

People included in box number two have developed cognitively (but not with the depth of number one) because of a parent identification that forced that development in order to get the limited amount of affection present in the family or classroom (note that with very low, disturbed affect this development is less likely to occur). Therapy enhances affect and allows more freedome to be creative. The surface intellect needs to be breached by a trust relationship in therapy for feelings to be expressed.

Peple included in box number three can be helped in the classroom to develop cognitively. These people have, through lack of stimulation in their environment and encouragement for intellectual growth, not developed as much as they could. With the opportunity available for cognitive growth these people do not need "therapy" per-se.

Most people fall into box four. There are many levels included there.

COGNITIVE

AFFECTIVE	predominately concrete operations	predominately pre-operational
character disorder		
neurotic		
psychotic		

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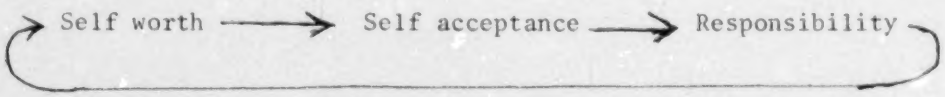
Since most individuals are complex combinations of affect and cognitive at any one time, no attempt at percentage is made for this table.

In therapy resolution in affect leads to greater risk taking and hence cognitive development. Artists, scientists and engineers have repeatedly worried that if they "got better" they would lose their thinking and creative abilities. In fact, they only lose their compulsions. They become more creative. This models shows what may occur through therapy.



All people do not "get better." They are inhibited by whatever schema they are composed of. There is no substitute for a supportive, open, feeling family and "circle" of friends. However, some rebuilding can take place in therapy so that greater use of a supportive, creative environment can be made. A variety of approaches (from talk therapy to primal therapy of psychodrama) are needed depending on the diagnosis, need and trust level of the patient.

AFFECTIVE ENVIRONMENT

The following list of affect-related attributes has been developed by me and others from research done in the classroom and in clinical therapy settings. These attributes are important for developing the affect that allows for ease in cognitive growth.

1. Risk taking (prerequisites are self esteem, self confidence, self worth and so forth).
2. Social environment (teacher, therapist, colleagues) which includes mild pressure as well as comfort and support.
3. Sensitivity to feelings as well as ideas.
4. Encourages creative contributions.
5. Sharing with others rather than in isolation ($1 + 1 > 2$ -- synergetic mode of productivity).
6. A feeling of freedom to explore -- positive independence.
7. A sense of integration of words, thoughts, feelings and actions.
8. Security without rigidity.
9. Responsibility for one's own actions.
10. Success based upon firsthand interaction rather than pre-processed simplicity by an arbitrary authority.
11. Acceptance of differences -- mutuality.
12. Individualization is based on uniqueness of a student's needs, not on isolation.

SOME SUGGESTIONS

The following list of suggestions are presented as indicators of areas where in-service growth experiences are needed to enhance the affective=cognitive link in the psyche.

1. Help teachers and teacher trainers in creative listening, group processes, role playing, formal thinking and so forth.
2. Training of counsellors and therapists in Piagetian principles.
3. Parent involvement in school-home effectiveness training programs.
4. Clergy need to delve more into feelings as well as ideas. Train for basic support services as well as referral.
5. Public officials (policemen, judges, probation officers, other decision makers) need in-service as well as pre-service seminars in affective and cognitive growth.

When thinking of creative growth, these thoughts sum up one man's optimistic belief toward ture possibilities:

> Let us dare to believe in the future; a future when men shall have learned to live by freedom and not by compulsion, by love and not by fear, by adventure and not by jealously guarded security.
>
> They shall live in peace and shared respect and none shall make them afraid.
>
> They shall be continuously hungry for knowledge and none shall say it is forbidden them; they shall live in trust, and none shall do them hurt.
>
> They shall explore without fear of what they may find, and the difficulties they meet shall be the stepping stones upward.
>
> Though this be slow in coming, though it appear that all this may never be universally shared, it will be open to all on the condition that one choose for himself.
>
> None shall create barriers between a man and the fulfillment of his spirit which the man may not of himself overthrow.
>
> It is the barrier we build against others which holds us, ourselves, back; the defenses we painstakingly establish become our own fetters.
>
> This could be the future of man if we dare: that men seek to master themselves instead of others, and rejoice in the fruits of discipline they choose for themselves.
>
> --Robert Weston

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